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NOTICE OF ALLOWANCE AND FEE(S) DUE

23557

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03/15/2010

SALIWANCHIK LLOYD & SALIWANCHIK A PROFESSIONAL ASSOCIATION PO Box 142950 GAINESVILLE, FL 32614

EXAMINER				
LAU, JONATHAN S				
ART UNIT	PAPER NUMBER			
1622				

DATE MAILED: 03/15/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,144	07/05/2007	Christian Belmant	INN.135	1963

TITLE OF INVENTION: CLASS OF GAMMA DELTA T CELLS ACTIVATORS AND USE THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	06/15/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 (571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 23557 7590 03/15/2010 Certificate of Mailing or Transmission SALIWANCHIK LLOYD & SALIWANCHIK I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. A PROFESSIONAL ASSOCIATION PO Box 142950 GAINESVILLE, FL 32614 (Depositor's name (Signature (Date APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE 10/581,144 07/05/2007 Christian Belmant INN.135 1963 TITLE OF INVENTION: CLASS OF GAMMA DELTA T CELLS ACTIVATORS AND USE THEREOF APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional YES \$755 \$300 \$0 \$1055 06/15/2010 **EXAMINER** ART UNIT CLASS-SUBCLASS LAU, JONATHAN S 1623 558-199000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number ______ (enclose an extra copy of this fo Advance Order - # of Copies _ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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10/581,144	07/05/2007	Christian Belmant	INN.135	1963	
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			ART UNIT	PAPER NUMBER	
PO Box 142950 GAINESVILLE, FL 32614		1623 DATE MAILED: 03/15/201	0		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 17 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 17 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)		
	 10/581,144	BELMANT ET AL.		
Notice of Allowability	Examiner	Art Unit		
	Jonathan S. Lau	1623		
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED or other appropriate comn IGHTS. This application is and MPEP 1308.	in this application. If not included nunication will be mailed in due course. THIS subject to withdrawal from issue at the initiative		
1. This communication is responsive to <u>Applicant's Amendment</u>	ent and Remarks AFTER F	<u>INAL, filed 09 Feb 2010</u> .		
2. \square The allowed claim(s) is/are 23-26 and 31-40.				
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). 	been received. been received in Applicat	ion No		
* Certified copies not received:				
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.				
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.				
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.			
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached				
1) hereto or 2) to Paper No./Mail Date				
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date				
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t				
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.				
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 Motice of	nformal Patent Application		
 Notice of References Cited (PTO-692) Dotice of Draftperson's Patent Drawing Review (PTO-948) 		Summary (PTO-413),		
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No	s./Mail Dates Amendment/Comment		
Paper No./Mail Date	_			
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	8. ⊠ Examiner' 9. □ Other	s Statement of Reasons for Allowance		
Jonathan Lau	/Shaojia Anna	 a .liang/		
Patent Examiner Art Unit 1623	'	atent Examiner, Art Unit 1623		

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Frank C. Eisenschenk on 23 Feb 2010.

The application has been amended as follows:

Amendment to the Claims

- 33 (Currently Amended). A method of immunotherapy or stimulation of an immune response comprising the administration of a composition comprising a pharmaceutically acceptable carrier and a compound according to claim 23 to a subject having a tumor, solid tumor or an infectious disease.
- 34 (Currently Amended). The method according to claim 33, wherein said subject is suffering from a tumor, solid tumor, an infectious disease or said subject requires the stimulation of an immune response.
- 39 (New). The method according to claim 33, wherein said subject is suffering from a solid tumor.
- 40 (New). The method according to claim 33, wherein said subject is suffering from an infectious disease.

DETAILED ACTION

This Office Action is responsive to Applicant's Amendment and Remarks AFTER FINAL, filed 09 Feb 2010, in which claims 23, 31, 33, 34 and 36 are amended to change the scope and breadth of the claim, and new claim 38 is added.

Applicant's Amendment and Remarks AFTER FINAL, filed 09 Feb 2010, will be entered because they are deemed to place the application in condition for allowance in view of the Examiner's Amendment detailed herein.

This application is the national stage entry of PCT/IB04/04311, filed 02 Dec 2004; and claims benefit of provisional application 60/579,237, filed 15 Jun 2004; and claims benefit of foreign priority document PCT/IB03/06375, filed 02 Dec 2003. This foreign priority document is in English.

Claims 23-26 and 31-40 are allowed in view of the Applicant's Amendment AFTER FINAL, filed 09 Feb 2010, and the Examiner's Amendment detailed herein.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Rejections Withdrawn

Applicant's Amendment and Remarks AFTER FINAL, filed 09 Feb 2010, with respect to claims 31-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement has been fully considered and is persuasive, as amended claims 31 and 33 do not recite Cat+ represents organic or mineral cation(s) including proton and Applicant's remarks are persuasive that the term "antigen" within the context of the instant invention reasonably conveys to one skilled in the relevant art that the inventors had possession of the claimed invention.

This rejection has been withdrawn.

Applicant's Amendment and Remarks AFTER FINAL, filed 09 Feb 2010, with respect to claims 33-35 rejected under 35 U.S.C. 112, first paragraph as not being enabled for the full scope of the claim has been fully considered and is persuasive, as amended claim 33-35 do not recite an autoimmune disease or an allergic disease and Applicant's remarks are persuasive that the specification is enabling for immunotherapy or stimulation of an immune response in a subject having a tumor or solid tumor without an undue amount of experimentation.

This rejection has been withdrawn.

The closest prior art is Fox et al. (J. Org. Chem., 2002, 67, p5009-5010, of record) in view of Patini et al. (Chem. Rev. 1996, 96, p3147-3176, of record) and in view of Parvin et al. (Biochemistry, 1969, 8(4), p1748-1755, of record).

Fox et al. in view of Patini et al. and in view of Parvin et al. teach as set forth in the Office Action mailed 22 Jun 2009.

Applicant's showing of unexpectedly advantageous results commensurate with the scope of the claim compared to the teaching of the prior art teaching bioisoteric equivalence is persuasive in view of the unpredictability in the art. The showing of unexpectedly advantageous results commensurate with the scope of the claim renders the instant invention non-obvious over the teachings of Fox et al. in view of Patini et al. and in view of Parvin et al.

Therefore the instant invention is not taught or fairly suggested by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Claims 23-26 and 31-40 are allowed in view of the Applicant's Amendment, filed 09 Feb 2010, and the Examiner's Amendment detailed herein.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan S. Lau whose telephone number is 571-270-3531. The examiner can normally be reached on Monday - Thursday, 9 am - 4 pm EST.

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Art Unit: 1623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jonathan Lau Patent Examiner Art Unit 1623 /Shaojia Anna Jiang/ Supervisory Patent Examiner Art Unit 1623